524,172

### (12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

# (19) World Intellectual Property Organization

International Bureau



### 1 (1888) 1 (

(43) International Publication Date 4 March 2004 (04.03.2004)

PCT

## (10) International Publication Number WO 2004/018502 A1

(51) International Patent Classification<sup>7</sup>: 14/705, C12N 15/67, A61K 48/00

C07K 7/06,

(21) International Application Number:

PCT/EP2003/007260

(22) International Filing Date:

4 July 2003 (04.07.2003)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 02078308.0

9 August 2002 (09.08.2002) EF

- (71) Applicant (for all designated States except US): YA-MANOUCHI EUROPE B.V. [NL/NL]; Elisabethhof 19, NL-2350 EW Leiderdorp (NL).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): APPELDOORN, Chantal, Catharina, Maria [NL/NL]; LACDR, Leiden University, Gorlaeus laboratories, P.O.Box 9502, NL-2300 RA Leiden (NL). BIESSEN, Erik, Anna, Leonardus [NL/NL]; LACDR, Leiden University, Gorlaeus laboratories, P.O.Box 9502, NL-2300 RA Leiden (NL). MOLENAAR, Thomas, Jacobus, Maria [NL/NL]; LACDR, Leiden University, Gorlaeus laboratories, P.O.Box 9502, NL-2300 RA Leiden (NL). KUIPER, Johan [NL/NL]; LACDR, Leiden University, Gorlaeus laboratories, P.O.Box 9502, NL-2300 RA Leiden (NL). VAN BERKEL, Theodorus, Josephus, Cornelis [NL/NL]; LACDR, Leiden University, Gorlaeus laboratories, P.O.Box 9502, NL-2300 RA Leiden (NL).
- (74) Common Representative: YAMANOUCHI EUROPE B.V.; Department of Legal Affairs Europe, Postbus 108, NL-2350 AC Leiderdorp (NL).

- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

#### **Declaration under Rule 4.17:**

as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)

### Published:

with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: COMPOUNDS BINDING TO P-SELECTIN

(57) Abstract: The present invention relates to derivatives of compounds which bind selectively to the adhesion molecule human P-selectin, and particularly to such derivatives which comprise a peptide moiety or a functional equivalent of said peptide moiety and are represented by  $X(A_x)_m A_3 A_1 A_2 A_1 Y$ . In addition, the invention relates to methods for preparing such compounds, to the use of such compounds in therapeutic or diagnostic methods and in pharmaceutical compositions, to binding molecules binding to said compounds and to a method for determining whether a compound is capable of binding to P-selectin.

